

CLAIMS

What is claimed is:

1. A method of interacting with a monitor, comprising:
modifying a portion of an output displayed on a monitor by tracking an eye gaze and by monitoring an input indicator on the monitor that reflects a user's activity, wherein the output comprises at least part of a target object;
wherein tracking the eye gaze comprises monitoring a user's eye movement in a direction of the target object, and further monitoring a trajectory of the input indicator on the monitor; and
wherein the portion of the output is modified upon detecting the coincidence of the user's eye movement and the input indicator trajectory in the direction of the target object.
2. The method according to claim 1, wherein modifying the portion of the output comprises selectively expanding the portion of the output.
3. The method according to claim 1, wherein modifying the portion of the output comprises selectively contracting the portion of the output.
4. The method according to claim 1, further comprising identifying the target object through eye-gaze tracking.
5. The method according to claim 4, wherein modifying the portion of the output comprises transforming the portion of the output that contains the target object to accommodate any of an expansion or a contraction of the target object.

6. The method according to claim 5, further comprising determining a modification time based on data derived concurrently from the user's eye gaze.

8. The method according to claim 5, wherein identifying the target object is based on data derived concurrently from the eye base and the direction of movement of the input indicator.

9. The method according to claim 1, further comprising identifying the portion of the output based on boundaries of interactive graphical user interface components.

10. The method according to claim 9, wherein the interactive graphical user interface components comprise any one or more of a button, a menu, a scrollbar, and a hypertext link.

11. The method according to claim 10, further comprising expanding the interactive graphical user interface components to permit interactivity.

12. The method according to claim 5, wherein the indicator is inputted by an input device that comprises any one or more of: a mouse, a touch, a touch screen, a tablet computer, a personal digital assistant, a stylus, and a motion sensor.

13. The method according to claim 5, wherein transforming the portion of the output comprises hiding an area of the monitor that is covered by an increase in size of the target object to accommodate a change in appearance of the target object.

14. The method according to claim 5, wherein transforming the portion of the output comprises moving one or more objects on the monitor toward one or more edges of the monitor to accommodate a change in appearance of the target object.

15. The method of claim 5, wherein transforming the portion of the output comprises reducing a size of one or more objects located adjacent the target object to accommodate a change in appearance of the target object while maintaining an original appearance of a remaining portion of the output.

16. The method according to claim 12, further comprising restoring the target object and the monitor to an original appearance when any one of the eye-gaze or the input device indicates that the target object has been deselected.

17. A system for interacting with a monitor, comprising:
means for modifying a portion of an output displayed on a monitor by tracking an eye gaze and by monitoring an input indicator on the monitor that reflects a user's activity, wherein the output comprises at least part of a target object;

wherein tracking the eye gaze is implemented by a means for monitoring an eye movement in a direction of the target object, and by a means for monitoring a trajectory of an input indicator on the monitor; and

wherein the portion of the output is modified upon detecting the coincidence of the user's eye movement and the input indicator trajectory in the direction of the target object.

18. The method according to claim 17, wherein the means for modifying the portion of the output selectively expands the portion of the output.

19. The method according to claim 17, wherein the means for modifying the portion of the output selectively contracts the portion of the output.

20. A software program product having instruction codes for interacting with a monitor, comprising:

a first set of instruction codes for modifying a portion of an output displayed on a monitor by tracking an eye gaze and by monitoring an input indicator on the monitor that reflects a user's activity, wherein the output comprises at least part of a target object;

wherein tracking the eye gaze is implemented by a second set of instruction codes for monitoring an eye movement in a direction of the target object, and by a third set of instruction codes for monitoring a trajectory of an input indicator on the monitor; and

wherein the portion of the output is modified upon detecting the coincidence of the user's eye movement and the input indicator trajectory in the direction of the target object.